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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,422	04/16/2004	Shinji Osawa	NKS-005	9937
20374	7590	04/24/2006	EXAMINER	
KUBOVCIK & KUBOVCIK SUITE 710 900 17TH STREET NW WASHINGTON, DC 20006			FOREMAN, JONATHAN M	
			ART UNIT	PAPER NUMBER
			3736	

DATE MAILED: 04/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/825,422	Applicant(s) OSAWA ET AL.	
	Examiner Jonathan ML Foreman	Art Unit 3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2006.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-4 and 6 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 4,934,380 to de Toledo.

In regards to claims 1, 3 and 6, de Toledo discloses a core wire (12, 24) formed with a mounting portion at a distal end portion; and a plurality of coil wires (14, 18) being fitted onto the mounting portion substantially in tandem and having different mechanical properties (Col. 4, lines 8 – 10; lines 18 – 20), the adjacent coil wires being connected with each other at the corresponding ends thereof, wherein one of the ends is formed into a tapered portion gradually reducing in outer diameter toward the end (Col. 4, lines 10 – 14; lines 28 – 32), and wherein the other corresponding end is formed into a receiving end portion into which the tapered portion is inserted. The proximal side coil (14) is formed with the tapered portion. De Toledo discloses the plurality of wires including a most distal coil wire (18), and a distal end tip (22) formed into a solid semi-spherical shape with its spherical surface being a distal end surface of the core wire and fixed to the respective distal ends of the core wire and the most distal coil wire (Col. 3, lines 17 – 19; Col. 3, lines 29 – 33). De Toledo discloses insertion of the tapered portion into the receiving portion for a length, but fails to disclose the length being 2% to 40% of the whole length of the coil wire having the receiving end portion. However, a change in the size of a prior art device is a design consideration within the skill of the

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art. *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the length of the insertion portion as disclosed by de Toledo to be 2% to 40% of the whole length of the coil wire having the receiving end portion or any other length as desired.

3. Claims 1, 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,640,970 to Arenas.

In regards to claims 1, 4 and 6, Arenas discloses a core wire (22) formed with a mounting portion at a distal end portion; and a plurality of coil wires (28, 36) being fitted onto the mounting portion substantially in tandem and having different mechanical properties (Col. 3, lines 63 – 65; Col. 4, lines 28 – 32), the adjacent coil wires being connected with each other at the corresponding ends thereof, wherein one of ends is formed into a tapered portion (41, 44) gradually reducing in outer diameter toward the end, and wherein the other corresponding end is formed into a receiving end portion into which the tapered portion is inserted.. The pitches of the receiving end portion of the coil wire are formed to be larger than those of the remaining portion (Col. 4, lines 20 – 24). The most distal coil wire is formed of a radiopaque material (Col. 4, lines 28 – 32). Arenas discloses the plurality of wires including a most distal coil wire (36), and a distal end tip (34) formed into a solid semi-spherical shape with its spherical surface being a distal end surface of the core wire and fixed to the respective distal ends of the core wire and the most distal coil wire (Col. 4, lines 24 - 26). Arenas discloses insertion of the tapered portion into the receiving portion for a length, but fails to disclose the length being 2% to 40% of the whole length of the coil wire having the receiving end portion. However, a change in the size of a prior art device is a design consideration within the skill of the art. *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the length of the

insertion portion as disclosed by Arenas to be 2% to 40% of the whole length of the coil wire having the receiving end portion or any other length as desired.

4. Claims 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,640,970 to Arenas as applied to claim 1 above, and further in view of US Patent No. 5,551,444 to Finlayson.

In regards to claim 2, Arenas discloses a plurality of transitional portions continuously disposed in the axial direction, and reduced gradually in outer diameter toward the distal end (Figure 2); and a distal end portion (26) disposed distally from the most distal transitional portion. However, Arenas fails to disclose the distal end portion being formed into a plate shape, or the taper ratio of the most proximal transitional portion being larger than that of other transitional portions. However, Finlayson discloses a guide wire having a plurality of transitional portions (12a, 12b, 12c) continuously disposed in the axial direction, and reduced gradually in outer diameter toward the distal end; and a distal end portion formed into a plate shape (12d), wherein the taper ratio of the most proximal transitional portion is larger than that of other transitional portions (See Table 1). It would have been obvious to one having ordinary skill in the art to modify the distal end portion and taper ratio of the most proximal transitional portion as disclosed by Arenas to include a plate shape and be the largest taper ratio as taught by Finlayson, in order to allow the guide wire to have a suitable flexibility to facilitate the movement of the guide wire along a selected artery (Col. 3, lines 25 – 29).

Response to Arguments

5. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan ML Foreman whose telephone number is (571)272-4724. The examiner can normally be reached on Monday - Friday 8:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571)272-4726. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JMLF



MAX F. HINDENBURG
SENIOR PATENT EXAMINER
TECHNOLOGY CENTER 3700